



OG-02-005
February 1, 2002

WCAP-15604-NP, Rev. 1
Project Number 694

Domestic Members

AmerenUE
Callaway
American Electric Power Co.
D.C. Cook 1 & 2
Carolina Power & Light Co.
H.B. Robinson 2
Shearon Harris
Consolidated Edison
Company of NY, Inc.
Indian Point 2
Duke Power Company
Catawba 1 & 2
McGuire 1 & 2
Energy Nuclear Operations Inc.
Indian Point 3
Exelon
Braidwood 1 & 2
Byron 1 & 2
First Energy Nuclear
Operating Co.
Beaver Valley 1 & 2
Florida Power & Light Co.
Turkey Point 3 & 4
Northeast Utilities
Seabrook
Millstone 3
Nuclear Management Co.
Point Beach 1 & 2
Prairie Island 1 & 2
Kewaunee
Pacific Gas & Electric Co.
Diablo Canyon 1 & 2
PSEG - Nuclear
Salem 1 & 2
Rochester Gas & Electric Co.
R.E. Ginna
South Carolina Electric
& Gas Co.
V.C. Summer
STP Nuclear Operating Co.
South Texas Project 1 & 2
Southern Nuclear
Operating Co.
J.M. Farley 1 & 2
A.W. Vogtle 1 & 2
Tennessee Valley Authority
Sequoyah 1 & 2
Watts Bar 1
TXU Electric
Comanche Peak 1 & 2
Virginia Electric & Power Co.
(Dominion)
North Anna 1 & 2
Surry 1 & 2
Wolf Creek Nuclear
Operating Corp.
Wolf Creek

International Members

Electrabel
Doel 1, 2, 4
Tihange 1, 3
Kansai Electric Power Co.
Mihama 1
Takahama 1
Ohi 1 & 2
Korea Electric Power Co.
Kori 1 - 4
Yonggwang 1 & 2
Nuclear Electric plc
Sizewell B
Nuklearna Elektrarna Krsko
Krsko
Spanish Utilities
Asco 1 & 2
Vandell 2
Almaraz 1 & 2
Vattenfall AB
Ringhals 2 - 4
Taiwan Power Co.
Maanshan 1 & 2

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attention: Chief, Information Management Branch,
Division of Inspection and Support Programs

Subject: Westinghouse Owners Group
Conditions for Acceptance of WCAP-15604-NP, Rev. 1, (Non-Proprietary),
"Limited Scope High Burnup Lead Test Assemblies" (MUHP-1046)

Reference: 1) Westinghouse Owners Group Letter, OG-01-070, "Transmittal of WCAP-15604-NP, Rev. 1, (Non-Proprietary), 'Limited Scope High Burnup Lead Test Assemblies'," November 29, 2001.

Attachment 1, "Conditions for Acceptance of WCAP-15604-NP, Rev 1" (draft) was transmitted by the NRC to Westinghouse on January 10, 2002.¹ These Conditions for Acceptance were subsequently reviewed and discussed with NRC staff (M. Chatterton and R. Caruso) during a conference call on January 11, 2002. As stated during the conference call, the seven Conditions for Acceptance are a brief synopsis of the key points that the industry has already agreed to and incorporated into WCAP-15604-NP, Rev. 1 (Reference 1). The Westinghouse Owners Group has reviewed and agrees with the Conditions for Acceptance as provided in Attachment 1.

If you require further information, feel free to contact Mr. Ken Vavrek in the Westinghouse Owners Group Project Office at 412-374-4302.

Very truly yours,

Robert H. Bryan, Chairman
Westinghouse Owners Group

attachment

¹ E-mail message from Muffet Chatterton (NRC) to William Slagle (Westinghouse), January 10, 2002.

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cc: WOG Steering Committee (1L, 1A)
WOG Primary Representatives (1L, 1A)
WOG Analysis Subcommittee Representatives (1L, 1A)
WOG Fuel Working Group Representatives (1L, 1A)
B. Barron, Duke Energy (1L, 1A)
C. Bakken, AEP (1L, 1A)
D.G. Holland NRC, USNRC OWFN 7D 11 (1L, 1A)
M. Chatterton, USNRC 10 B3 (1L, 1A)
R. Caruso, USNRC 10 B2 (1L, 1A)
D. Firth, B&WOG (1L, 1A)
T. Hurst, BWROG (1L, 1A)
R. Yang, EPRI RFP (1L, 1A)
O. Ozer, EPRI (1L, 1A)
T. Reick, Exelon (1L, 1A)
R. Gribble, Duke (1L, 1A)
J. Holm, Siemens (1L, 1A)
J. Willse, Framatome (1L, 1A)
R. Rand, GNF (1L, 1A)
J. Butler, NEI (1L, 1A)
H. A. Sepp, W- ECE 4-15 (1, 1A L)
G. Bischoff, Program Management Office ECE 5-16 (1L, 1A)

Conditions for acceptance of WCAP-15604-NP, Rev1

1. The number of fuel assemblies with fuel rods exceeding the current licensed lead rod average burnup shall be limited to a total of nine in PWRs and thirty-two in BWRs. No fuel rods shall exceed peak rod burnups greater than 75 GWD/MTU.

2. The fuel shall be typical production fuel with pre-characterization before operation above the current licensed lead rod average burnup limit. The fuel may also be an LTA, which was characterized during fabrication and was designed to test aspects of the fuel assembly but was ~~not initially identified as a high burnup LTA.~~ The latter fuel shall be pre-characterized before operation above the current licensed lead rod average burnup limit.

3. The pre-characterization of the fuel shall consist of at least the following minimum set of examinations: clad oxidation, rod/assembly growth and visual examinations for PWRs and clad oxidation, rod/assembly growth, channel bow, and visual examinations for BWRs.

4. The post-irradiation examinations of the fuel shall consist of at least the following minimum set of examinations: clad oxidation, rod/assembly growth and visual examinations for PWRs and clad oxidation, rod/assembly growth, channel bow, and visual examinations for BWRs.

5. The fuel shall be evaluated against and must meet all current design criteria except burnup limits. Current or modified fuel performance methods and codes shall be used even though they may not be licensed to the higher burnups.

6. For all fuel rods in the LTAs, the predicted oxidation shall be less than 100 microns on a best estimate basis with prediction of no blistering or spallation based on current data.

7. Utilities using the Limited Scope High Burnup LTA program shall submit two reports to the NRC for information.

The first report shall be a notification of intent to irradiate LTAs above the current burnup limit. It shall consist of at least the following information:

- Utility Name
- Plant Name
- Cycle and date when the LTA shall be inserted
- Number of LTAs
- Location of the LTAs
- Anticipated pre and post cycle burnups for each LTA
- Purpose of LTAs
- Data from the pre-irradiation characterization, if available
- Estimation of dates for pre and post irradiation characterization
- Estimation of date of second report
- Statement that the LTA will not be irradiated if Conditions 5 and 6 are not met or if the pre-characterization examinations show anomalous results.

The second report shall give the results of the pre and post irradiation examinations. It shall consist of at least the following information:

Utility Name
Plant Name
Fuel Assembly Identification Number
Specific Measurements - Actual data and predictions
Comment Section

DRAFT

For information or comments on this draft document, please contact:

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